

On “Polysomnography reveals unexpectedly high rates of organic sleep disorders in patients with prediagnosed primary insomnia” (Sleep Breath 2011 doi 10.1007/s11325-011-0608-8)

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Dear Editor,

We read with interest the study by Tatjana Crönlein and co-workers [1] and congratulate the authors on the work. Their study adds nicely to the existing evidence that comorbidity is important in insomnia and should be taken into account while evaluating these patients [2–4].

In a recent study, which the authors unfortunately fail to acknowledge in their list of references, our group has investigated with polysomnography 20 patients with otherwise unexplained insomnia [5] who were compared to healthy controls and patients with idiopathic restless legs syndrome (RLS). These 20 CNS-active drug-free insomniac patients in our study had been attentively selected from 153 consecutive insomnia patients who fulfilled general criteria for insomnia according to ICSD 2 (similar to DSM 4 criteria for insomnia), after exclusion of RLS and other sleep, neurological, or psychiatric comorbidity, by both thorough history taking and polysomnographic evaluation. Interestingly, in that study, 60% of patients had periodic leg movements during sleep (PLMS) $\geq 10/h$ and fulfilled periodicity and time distribution through the night criteria similar or identical to patients with RLS [6].

It must be recognized that the exact contribution of PLMS in patients without RLS to insomnia is incompletely understood or controversially discussed [7, 8], and that the

contribution of PLMS to cardiovascular risk is still hypothetical [9]. In addition, the diagnostic concept of periodic limb movement disorder, which has been developed to describe patients with insomnia and PLMS (among other criteria), is still strongly debated, as well as the question if PLMS should be treated in the absence of RLS (e.g., [10]). However, since PLMS can be found with a certain frequency also in normal controls aged above 40 years [11], the lack of a control group precludes Crönlein et al. [1] from proving a causative role of PLMS in their insomniac patients. Moreover, several of the patients with PLMS alone in their group were under antidepressant therapy with substances known to be able to induce PLMS [12]. Correctly, the authors reduced the dosage of these drugs in these patients. However, it is well known that insomnia and depression constitute a tight association. This casts additional doubts on the real role of PLMS in insomnia in these patients in whom they might have appeared only as a consequence of their therapy.

Nevertheless, we agree with the authors that polysomnography is useful in patients with otherwise unexplained insomnia. Thus the authors are in line not only with our own study [5], but also with many others [2–4].

Conflict of interest The authors declare that they have no conflict of interest.

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References

1. Crönlein T, Geisler P, Langguth B, Eichhammer P, Jara C, Pieh C, Zulley J, Hajak G (2011) Polysomnography reveals unexpectedly high rates of organic sleep disorders in patients with prediagnosed primary insomnia. *Sleep Breath*. doi:10.1007/s11325-011-0608-8

2. Valipour A, Lothaller H, Rauscher H, Zwick H, Burghuber OC, Lavie P (2007) Gender-related differences in symptoms of patients with suspected breathing disorders in sleep: a clinical population study using the sleep disorders questionnaire. *Sleep* 30:312–319
3. Shepertycky MR, Banno K, Kryger MH (2005) Differences between men and women in the clinical presentation of patients diagnosed with obstructive sleep apnea syndrome. *Sleep* 28:309–314
4. Luyster FS, Buysse DJ, Strollo PJ (2010) Comorbid insomnia and obstructive sleep apnea: challenges for clinical practice and research. *J Clin Sleep Med* 6:196–204
5. Ferri R, Gschliesser V, Frauscher B, Poewe W, Högl B (2009) Periodic leg movements and periodic leg movements disorder in patients presenting with unexplained insomnia. *Clin Neurophysiol* 120:257–263
6. Ferri R, Zucconi M, Manconi M, Plazzi G, Bruni O, Ferini-Strambi L (2006) New approaches to the study of periodic leg movements during sleep in restless legs syndrome. *Sleep* 29:759–769
7. Hornyak M, Riemann D, Voderholzer U (2004) Do periodic leg movements influence patients' perception of sleep quality? *Sleep Med* 5:597–600
8. Scofield H, Roth T, Drake C (2008) Periodic limb movements during sleep: population prevalence, clinical correlates, and racial differences. *Sleep* 31:1221–1227
9. Walters AS, Rye DB (2009) Review on the relationship of restless legs syndrome and periodic limb movements in sleep to hypertension, heart disease and stroke. *Sleep* 32:589–597
10. Santamaria J, Iranzo A, Tolosa E (2003) Development of restless legs syndrome after dopaminergic treatment in a patient with periodic leg movements in sleep. *Sleep Med* 4:153–155
11. Pennestri MH, Whittom S, Adam B, Petit D, Carrier J, Montplaisir J (2006) PLMS and PLMW in healthy subjects as a function of age: prevalence and interval distribution. *Sleep* 29:1183–1187
12. Yang C, White DP, Winkelman JW (2005) Antidepressants and periodic leg movements of sleep. *Biol Psychiatry* 58:510–514